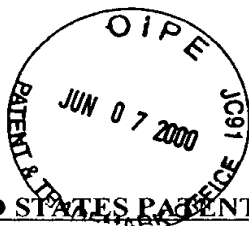


Docket No. 8733.20056



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Yong Beom KIM ✓

GAU: 2871

SERIAL NO: 08/936,510 ✓

EXAMINER: W. Malinowski

FILING DATE: September 24, 1997 ✓

FOR: REFLECTIVE-TYPE LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR MAKING THE SAME ✓

**REQUEST FOR RECONSIDERATION**

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

In response to the Office Action mailed January 7, 2000, applicant submits:

**REMARKS**

Claims 1, 3, 4 and 6-39 remain pending in this application.

Claims 1-39 are rejected under 35 USC 103(a) as being unpatentable over Sugiyama et al. (Sugiyama) in view of Toko, Izumi, Lu et al. (Lu), Shirai and Kanbe et al (Kanbe). This rejection is traversed for the reasons set forth below. Withdrawal of the rejection is respectfully requested.

As mentioned in the Office Action, Sugiyama fails to disclose several features recited in the currently pending claims, including that the liquid crystal display device is a reflective type with a reflective electrode formed over the first substrate, exposing the alignment layer to non polarized ultraviolet light to form the alignment directions, and that the reflective electrode has an opaque metal and a surface with convex portions. The Office Action relies on at least three different references to supply the missing features. First, either Izumi, Toko or Lu are relied on for teaching a reflective display. Second, Toko is relied on for teaching exposure to non-polarized ultraviolet light to form the alignment directions. Third, Kanbe is relied on for teaching a reflective electrode having an opaque metal and a surface with convex portions.

Even if all of the features of the currently-pending claims can be found in the prior art, a prima facie case of obviousness has not been established as no motivation to combine these references in the

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manner suggested in the Office Action has been shown. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. M.P.E.P § 2143. The teaching or suggestion to make the claimed combination must be found in the prior art, not the Applicant's disclosure. In re Vaek, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). The fact that the references are capable of being combined does not render the combination obvious. In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Without this teaching or suggestion, the rejection is improper. In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998).

Sugiyama is directed to a hybrid alignment type liquid crystal display, the hybrid alignment type liquid crystal display has properties that are similar to convention TN type liquid crystal displays. In contrast, the present invention is directed to a reflective type liquid crystal display. No consideration of the differences between these types of displays is discussed in the Office Action. Rather, the Office Action uses Applicant's specification as a road map to pick and choose various features from the prior art to arrive at the claimed invention. Accordingly, Applicant respectfully submits that the requisite motivation has not been shown. For these reasons, claims 1, 3, 4 and 6-39 are not rendered obvious by the combination of Sugiyama et al., Toko, Izumi, Lu et al., Shirai and Kanabe et al., whether taken alone or in combination, and should, therefore, be allowed.


In view of the foregoing remarks, Applicant respectfully submits that claims 1, 3, 4 and 6-9 are now in condition for allowance and early favorable action in the form of a Notice of Allowance is earnestly solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner for Patents to charge the cost of such petitions and/or other fees due in connection with this filing of this document to

*Deposit Account No. 50-0911.* However, the Assistant Commissioner is not authorized to charge the cost of the Issue Fee to the Deposit Account.

Respectfully submitted,

LONG ALDRIDGE & NORMAN, LLP



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